9/30/87 R4800-2

EDUCATION WEEK

American Education's Newspaper of Record | Volume VII, Number 4 · September 30, 1987 | © 1987 Editorial Projects in Education / $2.00

Senate Panel Completes Draft Of School Bill

Measure Would Extend Most Major Programs

By Julie A. Miller

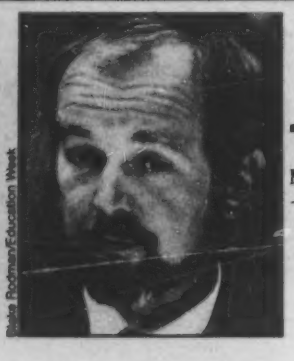
WASHINGTON—A Senate subcommittee last week released its version of a massive bill that would reauthorize several major education programs and create some new ones.

S 373, the Senate counterpart of H R 5—the omnibus reauthorization measure passed by the House in May—is a draft and thus is likely to change. But it offers a preliminary glimpse of which old issues and new ideas are likely to be wrangled over in a House-Senate conference, and which changes to familiar programs are likely to be adopted.

Like the House bill, it would amend and extend until 1993 the Chapter 1 compensatory-education program, Chapter 2 block grants, the Bilingual Education Act, the magnet-schools-assistance program, impact aid, the Adult Education Act, the Drug-Free Schools and Communities Act,

Continued on Page 16

Adam Urbanski



Peter McWalters

Blake Rodman/Education Week

Friendship and Trust: Unusual Keys to Radical Pact

By Blake Rodman

ROCHESTER, N.Y.—When Peter McWalters stepped from a high-ranking central-office position into the superintendency of this city's 33,000-student school district two years ago, he knew it was time for some radical changes.

"My system was simply failing, particularly around the question of equity," Mr. McWalters recalls.

Across town, Adam Urbanski, the flamboyant president of the local teachers' union and a vice president of the American Federation of Teachers, was yearning for change as well. His chosen occupation was suffering from a bad public image, and he was frustrated by the slow pace of national efforts to professionalize teaching.

While their counterparts in most other urban districts see themselves as staunch adversaries, Mr. McWalters and Mr. Urbanski began to notice points of commonality—a mutual desire for

Continued on Page 20

Students' Scores On College Tests Remain Stable

Minority Achievement Levels Still Rising

By Robert Rothman

For the second straight year, the scores of high-school seniors taking the two major college-admissions tests have shown little statistical variation from the previous year.

But testing officials last week saw encouraging signs in the rising number of students taking the exams and in the continuing gains of minority students.

Donald H. Stewart, president of the College Board, which administers the Scholastic Aptitude Test, said the larger pool of test-takers was significant in assessing the results because "greater numbers of test-takers usually mean lower averages."

He added that the increasing numbers taking the exams, particularly among minorities, "means that a great many more students are actually considering going to college."

Another encouraging sign in the data was that the S.A.T. scores of prospective teachers reached a record high.

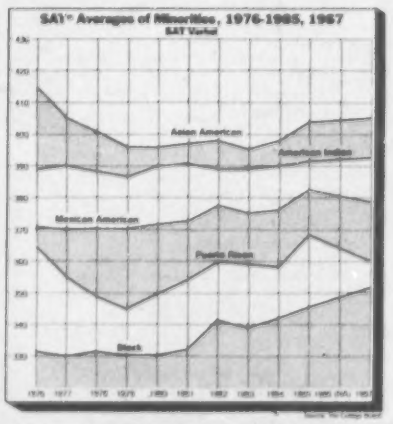
In releasing their annual testing data last week, officials of both the College Board and the American College Testing program attributed the higher minority scores in part to the increasing number of minority students taking strengthened core curricula.

The average score on the mathematics portion of the S.A.T. rose by a point, to 476 out of a possible 800. But scores on the verbal section of the test fell by a point, to 430 out of 800.

The average composite score on the A.C.T. fell by a tenth of a point—to 18.7 on a scale of 1 to 35—continuing a pattern of stability evident since the mid-1970's, program officials said.

A.C.T. scores for black, Hispanic, American Indian, and Asian American students rose for the third straight year. Black students' scores on the S.A.T. have risen by more than 20 percent since 1977, more than

Continued on Page 19



While white students' scores have fallen since 1976, test scores for all minority groups have risen in the past decade.

Wanted: Skilled Labor for High-Tech Jobs

Schools Rated a Key Factor in Business-Site Decisions

By William Montague

Increasingly concerned with their need for skilled workers, American manufacturers and corporate leaders are taking a harder look at the quality of a region's schools in deciding where to locate facilities.

In making determinations about where to move existing operations or open new ones, business planners have traditionally concentrated on a few key economic factors, such as taxes, wage rates, and the power of local labor unions.

But the pressures of a changing international marketplace are forcing many businessmen to pay closer attention to other issues, such as education, that affect their ability to recruit highly trained employees.

Analysts attribute this change to global trends that are bringing about the decline of older mass-production industries, such as steel and textiles, while spurring the growth of the specialized, high-technology enterprises that are expected to dominate the economy of the 21st century.

"In manufacturing, we as a nation don't really do much nowadays that can be handled by a low-skill workforce, and we'll do even less in the future," says Marilyn Block, an associate with the consulting firm of John Naisbitt, author of the best-selling book *Megatrends*.

"Companies now have a tremendous amount invested in their employees," Ms. Block adds, "and they are becoming more sensitive to that fact."

Although the new high-tech firms often

Continued on Page 14

Kansas City Judge's 'Excessive' Tax Order Ignites Public Furor, Has Leaders Ducking

By William Snider

A multi-million-dollar tax increase ordered this month by a federal judge in the Kansas City, Mo., school-desegregation case has sparked an "enormous outcry" in the midwestern city, and appears stalled by a host of legal and logistical uncertainties.

"Excessive, exorbitant and extravagant" is how Gov. John D. Ashcroft described the Sept. 15 ruling that requires the state and the Kansas City school district to split the cost of a $187-million plan for school construction and renovation.

"But far more outrageous," he added, "is the imposition of higher taxes on the residents and workers in the school district by an appointed official who is not required to answer to the voters."

Civil-rights lawyers and school officials argue that U.S. District Judge Russell G. Clark was relying on a solid base of legal precedent when he ordered a 25 percent surcharge on the income-tax rate of employees who work within the boundaries of the Kansas City district and virtually doubled the rate of the local property tax earmarked for schools.

"If you look at what the appellate court has said, [Judge Clark] had no alternative," said

Continued on Page 24

Also in the news

Chicagoans Invest In School Reform
Fifteen corporate leaders are underwriting a tuition-free model school they hope will be "a force for critical change" in education.
5

Education on AIDS: A Hostage to Politics?
While teachers await guidance, questions of money and emphasis stall policymaking on AIDS courses and leave pupils awaiting answers.
6

Home-School Forces See 'Trend Toward Freedom'
Impassioned lobbying has convinced leaders in a number of states to re-think their attendance laws and private-school rules.
11

IN SUMMARY

Half Empty, Half Full
A look at urban school districts' preschool programs for disadvantaged children reveals a "half-empty, half-full situation," according to the author of a new statistical profile of such programs in 28 major cities. **Page 4.**

Troubled Exchanges
A federal suit by two exchange students who were told they could not enroll in a Cobb County, Ga., high school has highlighted widespread confusion over school-placement policies for foreign students. **Page 5.**

Dealing With Morality
"There is a public hunger for the schools to deal with morality," argues the chief of the U.S. Education Department's research branch, which this month sponsored a conference for experts on character education. **Page 8.**

Brouhaha in West Virginia
Judges and political leaders in West Virginia appear to be on the verge of what one key lawmaker described as "yet another political brouhaha" over longstanding troubles in the state's system of school finance. **Page 11.**

Furor in Florida
Gov. Bob Martinez of Florida has touched off a furor among state education groups by saying he "made a mistake" in backing a 5 percent tax on services, and calling for repeal of the controversial levy. **Page 12.**

Expanding the Assessment
Two bills introduced in the Senate would implement an ambitious expansion of the National Assessment of Educational Progress proposed by a blue-ribbon panel named by the Secretary of Education. **Page 15.**

Reaching the Disadvantaged
The federal Chapter 1 program for disadvantaged children is, for the most part, reaching its intended beneficiaries, according to the final part of a Congressionally mandated assessment of the program. **Page 16.**

Appointments	27
Commentary	32
Deadlines	27
Events	27
In the Press	25
Marketplace	28
State Capitals	1?

EDUCATION WEEK (ISSN 0277-4232) is published 40 times per year (weekly except for the first week in January, the last week in June, the month of July, the first four weeks in August, and the last two weeks in December) by Editorial Projects in Education, Incorporated. Editorial and advertising sales offices are located at 1255 23rd Street, N.W., Suite 775, Washington, D.C. 20037. (202) 466-5190. Subscriptions: U.S.: $47.94 for 40 issues. Canada: $70.94 for 40 issues. Foreign: $112.94(airmail) and $80.94 (surface mail) for 40 issues. Second-class postage paid at Washington, D.C., and at additional mailing offices. POSTMASTER: Send address changes to EDUCATION WEEK, P.O. Box 6987, Syracuse, N.Y. 13217. Volume VII, Issue 4.

ACROSS THE NATION

NATIONAL

Food-Service Company Buys Children's World Preschool Centers

ARA Services Inc., the Philadelphia-based company best known for its food-services operations, has purchased Children's World, a national chain of 265 preschool centers.

The acquisition more than doubles ARA's stake in the child-care field, boosting its holdings to 440 centers in 19 states. Kinder-Care Learning Centers, headquartered in Montgomery, Ala., is the largest commercial day-care chain, operating 1,100 centers in 40 states.

Harry Belinger, a spokesman for ARA, cited market research showing that working women will continue to be one of the fastest-growing segments of the labor market and that the number of children needing day care will increase by 50 percent over the next decade.

He said his firm, which paid more than $100 million in cash for the Children's World centers, expects yearly revenues of $150 million from its preschool operations.

Test Shows 'Seriously Flawed' Knowledge of U.S. Constitution

Despite the year-long effort by educational groups to promote greater understanding of the Constitution, a new study calls high-school students' knowledge of the document's historical and philosophical foundations "seriously flawed."

The study, conducted this summer by the California-based Center for Civic Education, found that students were generally familiar with constitutional terms but did not understand what they meant.

Two out of three students tested did not know the essential difference between constitutional and dictatorial governments; 6 out of 10 did not know the meaning of "due process of law"; and 7 out of 10 did not know that, in the American political tradition, governments derive their authority from the consent of the governed.

The study is based on responses to a multiple-choice test administered to 599 students as part of preparations for a national competition developed by the center. Students participating in the competition, which will begin this fall, complete a three- to six-week course of study on constitutional principles, take a written test, and compete in mock Congressional hearings.

Spring Satellite Hook-Up To Link Soviet and American Teen-agers

Soviet and American teen-agers will hold a "youth summit" via satellite in March to exchange information on their favorite fashions, rock bands, and other aspects of their daily lives.

The Public Broadcasting Service and the Soviet Union's Channel One will air the program live on March 11, originating from Old Dominion University in Norfolk, Va., and a studio in Moscow.

The satellite exchange will be preceded on public-television stations by two national teleconferences, on Feb. 12 and Feb. 26, for American secondary-school audiences. They will include interviews with Soviet youths, questions from American teen-agers, and commentary by U.S. experts.

Vladimir Posner, a Soviet news commentator, will serve as moderator for the American students participating in the March satellite broadcast. Organizers have not yet named an American to moderate the program in Moscow.

The teleconference grew out of a model United Nations program run by Old Dominion. In 1985, a similar satellite broadcast linked schoolchildren in Minnesota with their counterparts in Moscow.

■ **The National Urban Coalition** has launched a demonstration program designed to stimulate interest in mathematics and science among minority and female elementary-school students.

Sponsored by the Shell Oil Company Foundation, the two-year program, known as "Say YES to a Youngster's Future," links schools with parents and community leaders who provide curricular materials, field trips, tutoring, and career counseling. It will begin this fall in 30 classrooms in Washington and Houston. Other cities may be added if funds are available.

■ **Six states and the District of Columbia** have signed an agreement to establish a multistate lottery that will offer much larger prizes than the states' own lotteries. Organizers argue that the higher jackpots will attract more players and thus more revenues for the states, which are seeking ways to finance education and other programs without raising taxes.

Lotto America, scheduled to begin in February, will offer top prizes of around $20 million, or up to $80 million if more states join, organizers predict. The states that have agreed to participate are Iowa, Kansas, Missouri, Oregon, Rhode Island, and West Virginia.

STATES

Pennsylvania Drops Test Rankings After Criticism by Districts

Pennsylvania's state school chief has scrapped a report ranking school districts by their students' test results, following criticism that the report was misleading and could be misconstrued.

Secretary of Education Thomas K. Gilhool, who had placed on public-library shelves several reports analyzing results from the Test for Essential Learning and Literacy Skills, withdrew a report ranking districts from 1 to 500 after superintendents who previewed it convinced him that a "gross numerical ranking was simply not significant statistically," said Timothy Potts, a spokesman for the Secretary. The superintendents contended that the rankings were misleading because results were spread so narrowly across districts, he said.

Mr. Gilhool also was concerned, his spokesman said, that the report would dwarf other data highlighting the common features of high-achieving schools, such as improved reading and math programs, effective teaching practices, and parental support.

Citing 47 schools with high poverty rates and strong TELLS results, Mr. Gilhool had said poverty need not be a barrier to achievement. But a coalition of urban superintendents who helped persuade the state chief to withdraw the ranking found a "clear correlation" between concentrations of low-income students and TELLS results.

■ **Responding to calls for help** from the state's school districts, the Texas Education Agency plans to hire 10 technical consultants to help schools comply with tough new standards for academic performance.

The consultants will visit schools that are having trouble implementing state-ordered improvements in curricula, student testing, and other areas, according to an agency spokesman. District officials have complained that they lack the funds and expertise to accomplish the far-reaching reforms mandated in recent years.

■ **"Parents as Teachers,"** Missouri's unusual early-childhood intervention program, has been named one of 10 winners in the 1987 Innovations in State and Local Government Awards Program of the John F. Kennedy School of Government at Harvard University.

The award to "Parents as Teachers," the only winner in the public-education field, includes a $100,000 grant that state officials will use to strengthen the program. Created under a 1984 Missouri law, the PAT program provides information and counseling to some 53,000 families with children under age 3.

■ **Citing a lack of both time and money,** health officials in Illinois said last week that they would not be able to inspect all of the state's 7,000 public and private schools for asbestos by Jan. 1, 1989—the deadline set by the legislature.

The effort has been severely curtailed by the legislature's decision last spring to appropriate no funds for school inspections for the fiscal year that began July 1, said Donald T. Anderson, asbestos coordinator in the state department of public health. Even when fully funded, he said, the project was time-consuming. The department has inspected 1,500 to 1,600 schools since April 1986, when the program began.

■ **Year-round scheduling** designed to relieve overcrowded schools is an acceptable way to stretch resources without hurting students' test scores, researchers in California have concluded.

An analysis of California Assessment Test scores for students in the state's 277 schools on year-round calendars found that most students, despite alternating between nine weeks of classes and three-week breaks, performed as well as their peers in schools with traditional schedules.

The study also looked at the effects on year-round programs of parental support, which it found strongly correlated with success, and the community's socioeconomic status. Copies of the report can be obtained for $5 each from the California Department of Education, Publications, P.O. Box 271, Sacramento, Calif. 95814.

DISTRICTS

Anti-Busing Candidates Make Strong Showing in Seattle Primary

The president of the Seattle school board has been defeated in a primary election by a candidate who favors eliminating the district's self-imposed mandatory-busing plan.

Other anti-busing candidates also fared well in the primary, which narrowed the field of candidates for the four open seats on the district's seven-member board.

The primary results this month set the

School Quality: Growing Factor in Business-Site Decisions

Continued from Page 1

create only a relatively small number of jobs, the high salaries they pay and the prestige they lend to an area can be a powerful stimulant to economic growth, analysts note.

For this reason, many states have scrambled to attract the new industries with generous subsidies and tax-incentive packages. But a growing number of experts are arguing that such expenditures would be better directed to improving local schools.

"Our studies tell us that business leaders care more about locating in areas that have laid strong foundations for long-term economic growth than they do about short-term incentives," says Sol Hurwitz, senior vice president of the Committee for Economic Development.

"Corporate leaders see education as the cornerstone of that foundation," he adds, quoting from a recent C.E.D. study.

These trends were highlighted recently when one of the nation's largest accounting firms released the 1987 edition of its annual survey of business climates in the 48 states on the U.S. mainland.

The firm, Grant Thornton, asked business and government leaders to rate the relative importance of the various state characteristics that attract or repel manufacturers. For the first time, the list included a number of so-called "quality of life" factors, such as health care, transportation, and education.

Somewhat suprisingly, researchers noted, those polled gave little weight to most quality-of-life issues, except for education, which placed sixth on a list of 21 factors.

Pressures to keep costs down largely account for the continued predominance of narrow economic factors, Grant Thornton officials say. But education is clearly being viewed in that same light.

Unlike many quality-of-life issues, the value of good schools can be measured in dollar terms, Ms. Block notes. Corporations, she says, spend "literally tens of billions of dollars" on training programs for their employees, and are keenly aware of how a poor education system can add to those costs.

"The high scoring of education . . . underscores the importance manufacturers place on having a well-qualified, well-trained workforce," says Selwin Price, the Grant Thornton partner in charge of the survey.

According to the survey, school quality—which was measured on the basis of teacher salaries, graduation rates, classroom sizes, and other key statistics—was thought more important than energy costs, taxes, and the local cost of living.

And another education-related factor, the availability of trained workers, was ranked third in the survey, behind only wages and labor-union strength.

'Trying To Have the Best'

According to economic-development officials, these results are borne out by their experiences in recent years.

Bill Boozer, a spokesman for the Tennessee Department of Economic and Community Development, recalls how that state's trailblazing efforts at education reform helped attract General Motors' giant Saturn auto plant, which will be built in a small town near Nashville, the state capital.

"They said they weren't coming to Tennessee because we had the best school system in the nation but because we were trying to have the best system."

According to John Crothers, the department's director of high-tech development, his agency acts as an educational "broker," matching prospective employers with the training services they need to thrive in an environment of rapid change.

While potential investors have long been aware of the value of a state's higher-education system—a crucial incubator for scientific research and development—the quality of public precollegiate education has also become a key issue, he said.

"We have found that when a client is looking at a particular community, high on the priority list is the quality of the public schools. It's just not negotiable," Mr. Crothers said. "That has gut to be one of the finer points of the area or they are just not going to look at it anymore."

Although often overlooked, private schools can also influence the corporate planning process, he added. Many business leaders, he notes, come from a private-school background themselves and want to be sure that their own children can find a good school close by.

A state's willingness to try new techniques, such as merit pay for teachers, that seek to improve productivity and encourage excellence can also play a role in attracting businesses, Mr. Crothers adds.

"They like to see those kinds of ideas because that's how they try to do business themselves," he said. "It lets them know we have a philosophy that strives for excellence."

AME

12th Annual Conference
The Association for Moral Education

RESPONDING TO CONTEMPORARY VALUES:

THE CHALLENGE FOR EDUCATORS

November 13-14, 1987

at

Harvard University
Cambridge, Massachusetts

What should be the schools' involvement in promoting moral values and moral development? Debate is becoming more impassioned as programs are implemented in some communities, as research findings are disseminated, and as changes in contemporary values pose new challenges for educators.

Featured speakers at the 12th annual AME conference include:

William Sullivan, co-author, *Habits of the Heart*
Richard Hersh, co-author, *Promoting Moral Growth*
Jane Roland Martin, author, *Re-Claiming a Legacy*

Conference topics include: prejudice and sexism in the classroom, the media's influence on student values, sex education, censorship in the classroom, democratic schools, social and moral education in the elementary schools, and many others.

For complete program information, call (617) 495-3572, or write:

AME Conference
339 Gutman Library
Harvard Graduate School of Education
Cambridge, MA 02138

State Education Rankings: A Government and Industry Perspective

Below is a summary of data from an annual study of manufacturing climates in 48 of the 50 states, conducted by the accounting firm of Grant Thornton. The report ranks the importance of 21 key factors, including education, then weights those factors to arrive at a combined score for each state. Weights are based on a nationwide survey of government and industry officials.

The education score for each state is based on an index that takes into account the following statistics: average teachers' salaries; student-teacher ratios, high-school graduation rates; state expenditures for public and higher education; and illiteracy rates. Shown at top are the overall rankings of factors cited as significant. At bottom are the states' standing on the education factor, nationally and by region. The highest-rated state, Tennessee, is 48; the lowest, Wyoming, is 1.

Rank	Factors
1	Wages
2	Unionization
3	Available Work Force
4	Workers' Compensation Insurance Levels*
5	Change in Wages
6	Education*
7	Energy Costs
8	Value Added
9	Change in Unionization
10	Expenditure vs. Personal-Income Growth
11	Manhours Lost
12	Unemployment Compensation Benefits*
13	Taxes*
14	Average Workers' Compensation Insurance Payment*
15	Change in Taxes
16	Unemployment Compensation Net Worth*
17	Cost of Living
18	State Business Incentives*
19	Transportation*
20	Health Care
21	Debt Growth vs. Personal-Income Growth*

SOURCE: Grant Thornton Accountants and Management Consultants

* Indicates factor is controlled or strongly influenced by state or local governments.

State	National Rank 1986	Regional Rank 1986
South Western		
Regional Averages	**22**	
Arizona	28	4
Colorado	13	2
Nevada	46	5
New Mexico	11	1
Utah	15	3
North Central		
Regional Averages	**15**	
Idaho	29	8
Iowa	7	3
Kansas	14	6
Missouri	42	9
Montana	3	2
Nebraska	12	5
North Dakota	8	4
South Dakota	18	7
Wyoming	1	1
South Eastern		
Regional Averages	**39**	
Alabama	33	3
Florida	47	8
Georgia	46	7
Kentucky	34	4
Mississippi	44	6
North Carolina	31	1
South Caroline	35	5
Tennessee	48	9
Virginia	32	2
New England		
Regional Averages	**25**	
Connecticut	30	4
Maine	23	3
Massachusetts	37	5
New Hampshire	39	6
Rhode Island	17	2
Vermont	6	1
South Central		
Regional Averages	**38**	
Arkansas	43	4
Louisiana	40	3
Oklahoma	24	1
Texas	36	2
Midwestern		
Regional Averages	**21**	
Delaware	4	1
Maryland	22	4
New Jersey	38	6
New York	19	3
Pennsylvania	25	5
West Virginia	16	2
Western		
Regional Averages	**11**	
California	27	3
Oregon	2	1
Washington	5	2
Great Lakes		
Regional Averages	**21**	
Illinois	41	6
Indiana	21	4
Michigan	20	3
Minnesota	10	2
Ohio	26	5
Wisconsin	9	1

SOURCE: Grant Thornton Accountants and Management Consultants

College-Admission Scores Remain Stable in 1986-87

Continued from Page 1

those of any other ethnic group, according to Mr. Stewart.

Both testing organizations also reported that the number of test-takers indicating they planned to major in education increased, and that their average scores, while lower than the national average, rose last year.

These trends are probably related to efforts by the states to increase the status and salaries of teachers, said Robert G. Cameron, executive director of research and development for the College Board.

'Holding Ground'

The A.C.T. primarily serves students in the Midwest and the South, where many public colleges and universities require it for admission. Unlike the S.A.T., the A.C.T. measures student performance in natural science and social studies, as well as in English and math.

The S.A.T., developed by the Educational Testing Service, is used primarily in the Northeast and on the West coast, and is favored by many private higher-education institutions as an admissions standard.

During the past year, however, a number of private institutions, such as Middlebury College, have dropped their use of the S.A.T. in admission decisions.

The test scores have also been used by some education observers—inappropriately according to critics—as a measure of the health of the education system. In a statement last week, U.S. Secretary of Education William J. Bennett said the results suggest that the school-reform movement may have stalled.

"Holding ground is better than losing ground, but we still see an insufficient payoff for what we've invested in education," Mr. Bennett said. "We need better results."

But Mr. Bennett called the rise in the number of students taking the exams "good news."

A total of 1,080,426 seniors took the S.A.T. last year, 80,000 more than the previous year; 777,444 seniors took the A.C.T., an increase of nearly 48,000.

The rise of nearly 8 percent in the number of S.A.T.-takers was substantially higher than expected, said Mr. Cameron of the College Board, since the number of 17-year-olds rose by only about 2 percent last year.

He added that the increase in the number of minority test-takers was a reversal of past trends, perhaps indicating that more black students would attend college this fall.

"They have been declining slightly in numbers and proportion," Mr. Cameron said. "This may indicate a turnaround in minority enrollment."

Minority Achievement

The minority students who took the tests last year also scored better than those in past years, although their average scores still trailed national averages, Mr. Cameron said. The average verbal S.A.T. score for black students rose to 351—up from 342 in 1985, the last year for which figures are available. The average math score rose one point, to 377.

On the A.C.T., black students' composite scores rose from 13 in 1986 to 13.4, while scores for Mexican-Americans rose from 15.2 to 15.4, and those for Puerto Ricans and other Hispanics rose from 16.5 to 16.9.

These increases are related, said Samuel D. Cargile, director of the A.C.T.'s office of minority education, to the fact that more minority students are taking "core curricula" that include four years of English and three years each of math, science, and social studies.

The A.C.T. found that students who had taken such a core curriculum scored, on average, nearly four points higher than students who had taken less than the core, Mr. Cargile noted.

"Over the past several years, the proportion of A.C.T.-tested students from minority groups taking a core high-school curriculum has increased noticeably," he said.

"It is likely that these increased enrollments in core curricula, along with such other factors as students' motivation and the recent emphasis on academic development by the schools, are associated with the increase in average A.C.T. composite scores for minority students," he added.

Similarly, the College Board, which for the first time surveyed the academic background of test-takers last year found that those who had taken more advanced courses in English, math, and science tended to score higher on the exam.

"There is no guarantee that the study of physics will increase one's test scores," said Mr. Cameron. "But the relationship [between courses taken and scores] tends to be linear and very strong."

That relationship also helps explain the fact that women's average math score was 23 points below the national average, while men's was 24 points above the national average, he said. The student data revealed that although more women than men took the S.A.T., men outnumbered women in advanced math classes, such as trigonometry and calculus.

Prospective Teachers

Both organizations also reported that education is now the fifth most popular intended major among test-takers.

Among those who took the A.C.T., 8 percent said they planned to study education in college, up from 7 percent a year ago. The average composite score for these prospective teachers remained the same as the previous year's, at 17.6.

The S.A.T. scores of prospective teachers, on the other hand, reached a new high of 408 on the verbal section and 437 in math.

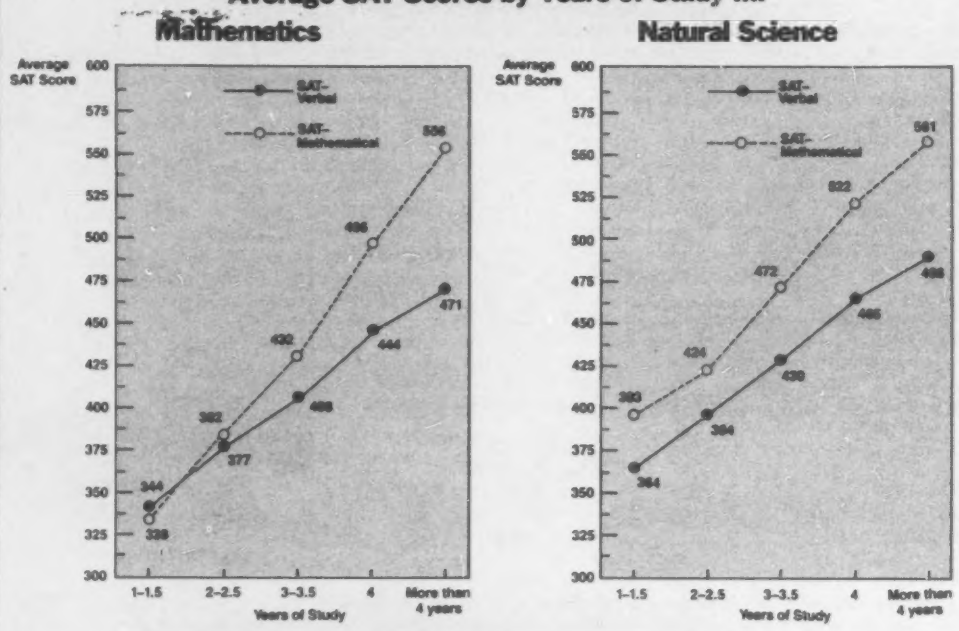
Some 6 percent of S.A.T. takers said they planned to study education.

Other findings of the testing organizations included:

- Average scores on the A.C.T.'s English, mathematics, and social-studies assessments each fell by a tenth of a point over the past year, while the average score on the natural-sciences portion of the test remained the same. The average English score was 18.5; math, 17.2; social studies, 17.5; and natural sciences, 21.4.
- The number of students taking the College Board's achievement tests—14 one-hour tests in specific subject areas—rose by 4 percent, to 200,000, and the average scores increased by 4 points, to 544 out of 800. For only the second time, more women than men took achievement tests, the board reported.

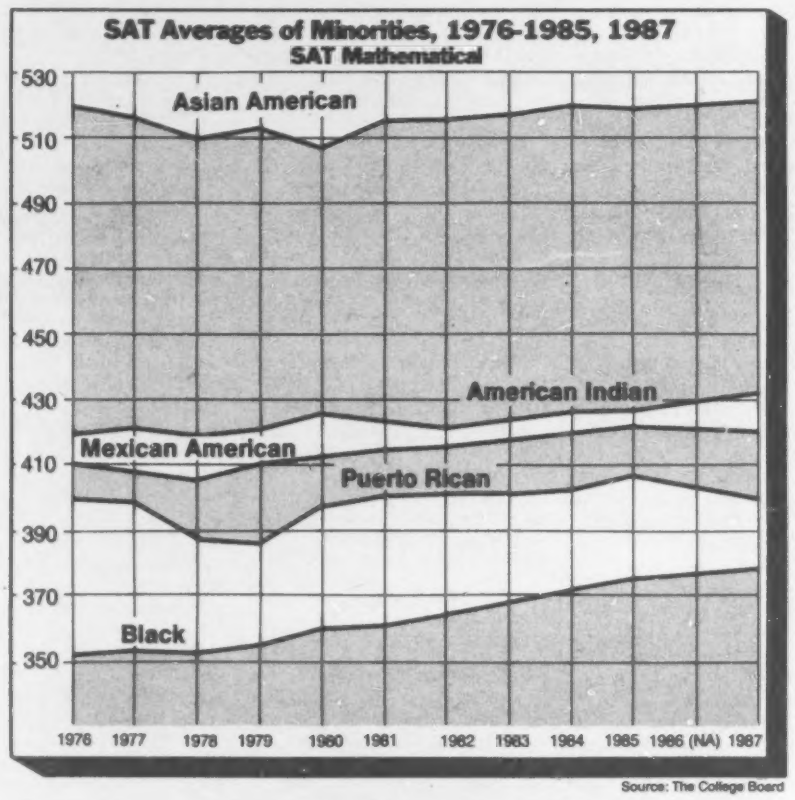
Indicators of Student Achievement: Findings From the ACT, SAT Examinations

Average SAT Scores by Years of Study In:



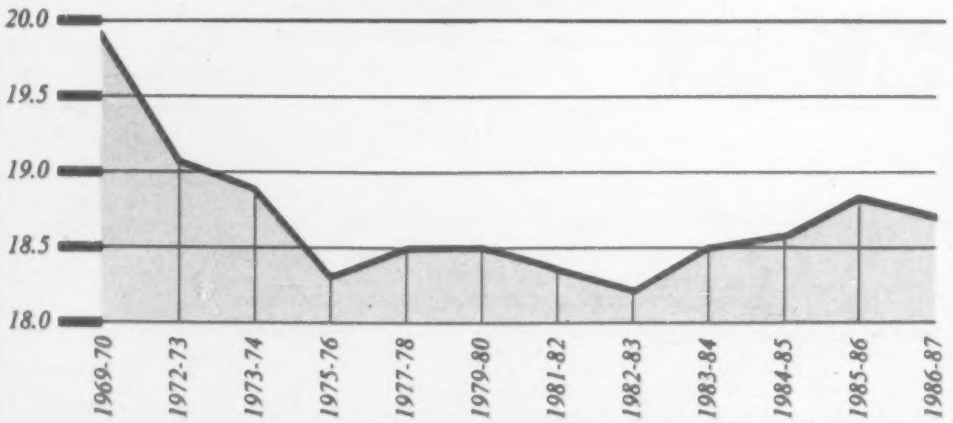
SAT Averages of Minorities, 1976-1985, 1987

SAT Mathematical



Source: The College Board

Trends in Composite ACT Scores 1969-1970 — 1986-1987[1]



[1]For each year through 1983-84, the information in these graphs has been based on the performance of students who tested on national test dates during that year. Since 1984-85, these data have been based on the performance of students who tested on national test dates and graduated in the spring of the given year.

Source: The American College Testing Program